In the Claims:

Please cancel claims 1-9. Please amend claims 12-20. Please add new claims 21-28.

The claims are as follows:

1-9 (Canceled)

10. (Currently Amended) A method of fabricating a semiconductor structure, comprising:

(a) providing a substrate;

(b) forming a dielectric layer on a top surface of said substrate;

(c) forming a polysilicon layer on a top surface of said dielectric layer;

(d) implanting a less than whole first portion of said polysilicon layer with N-dopant species, said N-dopant species about contained within said polysilicon layer;

(e) implanting a less than whole second ~~and different~~ portion of said polysilicon layer with P-dopant species, said second portion different from said first portion, said P-dopant species about contained within said polysilicon layer;

(f) implanting said first portion of said polysilicon layer with a first nitrogen containing species, said first nitrogen containing species essentially contained within said polysilicon layer; and

after (a), (b), (c), (d), (e) and (f), (g) patterning said first portion of said polysilicon layer into a first polysilicon line and patterning said second portion of said polysilicon layer into a second polysilicon line.

11. (Currently Amended) The method of claim 10, further including:

prior to (g), implanting said second portion of said polysilicon layer with ~~said~~ a second nitrogen containing species.

12. (Currently Amended) The method of claim 10, wherein a peak concentration of said N-dopant species is about equal to a peak concentration of said first nitrogen containing species at about a same distance from a top surface of said polysilicon layer.

13. (Currently Amended) The method of claim 10, wherein a surface concentration of said N-dopant species is about equal to a surface concentration of said first nitrogen containing species at about a same distance from a top surface of said polysilicon layer.

14. (Currently Amended) The method of claim 10, wherein said N-dopant species and said first nitrogen containing species have about a same ion implantation concentration profile.

15. (Currently Amended) The method of claim 10, wherein a surface concentration of said N-dopant species is between about 1E18 atm/cm^3 to about 1E22 atm/cm^3 and a surface concentration of said first nitrogen containing species is between about ~~abut~~ 1E18 atm/cm^3 to about 1E21 atm/cm^3.

16. (Currently Amended) The method of claim 10, wherein:

wherein a peak concentration of said N-dopant species is between about 1E18 atm/cm^3 to about 1E22 atm/cm^3 and a peak concentration of said first nitrogen containing species is between about 1E18 atm/cm^3 to about 1E21 atm/cm^3; and

said peak concentration of said N-dopant species occurring between a distance of about 0 nm and about 1/3 of a thickness of said polysilicon layer from a top surface of said polysilicon layer and said peak concentration of said nitrogen containing species occurring between about 0 nm to about 2/3 of said thickness of said polysilicon layer from said top surface of said polysilicon layer.

17. (Currently Amended) The method of claim 10, wherein:

said N-dopant species is selected from the group consisting of phosphorus and arsenic; and

said first nitrogen containing species is selected from the group consisting of N, N_2, NO, NF_3, N_2O and NH_3.

18. (Currently Amended) The method of claim 10,-further including:

before (b), forming an N-well and a P-well in said substrate, wherein at least a portion of said first polysilicon line is formed over said P-well formed in said substrate and at least a portion of said second polysilicon line is formed over said N-well formed in said substrate, ~~after steps (a) through (f), (g) patterning said first portion of said polysilicon layer into one or more~~ wherein an NFET gate electrode[[s]] comprises a portion of said first polysilicon line and ~~patterning said second portion of said polysilicon layer into one or more~~ wherein a PFET gate electrode[[s]] comprises a portion of said second polysilicon line; and

after (g), (h) performing a thermal oxidation of sidewalls and top surfaces of said ~~one or more~~ NFET and PFET gate electrodes to form a thermal oxide layer on sidewalls of said NFET and PFET gate electrodes.

19. (Currently Amended) The method of claim 18, wherein said nitrogen containing species retards oxidation of said ~~one or more~~ NFET gate electrode[[s]].

20. (Currently Amended) The method of claim [[18]] 21, further including:

after ~~step (h) removing said thermal oxide layer from said top surfaces of said NFET and PFET gate electrodes and~~ (i), forming [[a]] respective metal silicide layers on said ~~top~~ surfaces of said NFET and PFET gate electrodes and said sources and drains in said N-well and said P-well.

21. (New) The method of claim 18, further including:

after (g), (i) implanting regions of said P-well on opposite sides of said NFET gate electrode with an N-type dopant species to form a source and a drain in said P-well and implanting regions of said N-well on opposite sides of said PFET gate electrode with a P-type dopant species to form a source and a drain in said N-well.

22. (New) The method of claim 18, further including,

before forming said P-well and N-well, forming a dielectric trench isolation in said substrate, said dielectric trench isolation extending from said top surface of said substrate into said substrate, said P-well and said N-well abutting opposite sidewalls of said trench isolation.

23. (New) The method of claim 10, further including:

forming a dielectric trench isolation in said substrate, said dielectric trench isolation extending from said top surface of said substrate into said substrate.

24. (New) The method of claim 23, wherein (d) includes forming a first ion implantation masking layer on a top surface of said polysilicon layer, said first ion implantation masking layer overlapping said trench dielectric layer, covering said second portion of said polysilicon layer and preventing implantation of said N-dopant species into said second portion of said polysilicon layer, and wherein (e) includes forming a second ion implantation masking layer on a top surface of said polysilicon layer, said second ion implantation masking layer overlapping said trench dielectric layer, covering said first portion of said polysilicon layer and preventing implantation of said P-dopant species into said first portion of said polysilicon layer.

25 (New) The method of claim 24, wherein (e) includes forming a third ion implantation masking layer on a top surface of said polysilicon layer, said third ion implantation masking layer overlapping said trench dielectric layer, covering said second portion of said polysilicon layer and preventing implantation of said nitrogen containing species into said second portion of said polysilicon layer.

26. (New) The method of claim 23, wherein (e) includes forming an ion implantation masking layer on a top surface of said polysilicon layer, said ion implantation masking overlapping said trench dielectric layer, covering said second portion of said polysilicon layer and preventing implantation of said nitrogen containing species into said second portion of said polysilicon layer.

27. (New) The method of claim 11, wherein said first and second nitrogen containing species are the same species.

28. (New) The method of claim 11, wherein said first and second nitrogen containing species are the same species and (f) and (h) are performed simultaneously.